

Electron paramagnetic resonance, acoustic EPR, and spontaneous spin-lattice relaxation at low temperatures

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Abstract

The effect of the coherent properties of the exciting field on the rate of spin-lattice relaxation is evaluated. It is shown that at low temperatures and high transverse components of the magnetic and elastic multipoles, relaxation is basically controlled by the interaction with the lattice of transverse oscillating components of the magnetization (or elastic moment), developing from interaction of the spin system with the changing field. © 1975 Plenum Publishing Corporation.

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